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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,278

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Miyoko Fujimoto

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EXAMINER

RADKOWSKI, PETER

ART UNIT

PAPER NUMBER

2883

MAIL DATE

DELIVERY MODE

05/26/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Supplemental  
Notice of Allowability**

Application No.

10/593,278

Examiner

PETER RADKOWSKI

Applicant(s)

FUJIMOTO ET AL.

Art Unit

2883

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/13/2008.
2. ☒ The allowed claim(s) is/are 1-19.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 4/3/2009 and 4/22/2009
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

/K. Cyrus Kianni/  
Primary Examiner, Art Unit 2883



***Detailed Office Action***

***Comments***

1. On December 31, 2008, applicant added dependent claims 16, 17, 18 and 19.
2. On April 3, 2009 and April 22, 2009, applicant submitted IDS forms. The examiner considered the documents cited by these two IDS statements and determined that the information contained in these documents does not affect the patentability of claims 1 - 19.

***Response to Applicant's Arguments***

3. As applicant argues, prior art reference van Woesik (5,408,551; "van Woesik") fails to teach an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, having a fixing member for fixing and bundling at least two portions of the same optical fiber at a crossing zone of the partial annular portion. Applicant's Arguments, p. 7, ll. 20-21. This argument is persuasive in light of applicant's amendments to independent claim 1 wherein applicant adds the limitation of "a fixing member for fixing and bundling at least two portions of the optical fiber at a crossing zone of the two portions." This limitation allows the fixing member to adjust a radius of an annular shaped fiber.

van Woesik remains the closest prior art of record in this application. However, in light of the applicant's amendment, claims 1, 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowable as distinguished over the prior art of record because of the reason stated above. It is this examiner's

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position that prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious the limitations of the claims discussed above.

4. As applicant argues, prior art reference van Woesik (5,408,551; "van Woesik") fails to teach an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, having a fixing member for fixing and bundling at least two portions of the same optical fiber at a crossing zone of the partial annular portion. Applicant's Arguments, p. 7, ll. 20-21. This argument is persuasive in light of applicant's amendments to independent claim 2 wherein applicant adds the limitation of "a fixing member for fixing and bundling at least two portions of the optical fiber at a crossing zone of the two portions." This limitation allows the fixing member to adjust a radius of an annular shaped fiber.

van Woesik remains the closest prior art of record in this application. However, in light of the applicant's amendment, claims 2, 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowable as distinguished over the prior art of record because of the reason stated above. It is this examiner's position that prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious the limitations of the claims discussed above.

5. As applicant argues, prior art reference van Woesik (5,408,551; "van Woesik") fails to teach an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, having a plurality of partial annular portions being fixed on a member. Applicant's Arguments, p. 8, ll. 7-9. This argument is persuasive in light of applicant's amendment to independent claim 3 wherein applicant adds the limitation of "intermediate regions of the optical fiber in an arc shape" and the "plurality of annular portions

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are fixed on a member.” This limitation allows the fixing member to adjust a radius of an annular shaped fiber.

van Woesik remains the closest prior art of record in this application. However, in light of the applicant’s amendment, claims 3, 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowable as distinguished over the prior art of record because of the reason stated above. It is this examiner's position that prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious the limitations of the claims discussed above.

6. As applicant argues, prior art reference van Woesik (5,408,551; "van Woesik") fails to teach an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, having an intermediate region of the optical fiber formed in a spiral shape around a bar. Applicant’s Arguments, p. 8, ll. 11-15. This argument is persuasive in light of applicant’s amendment to independent claim 4 wherein applicant adds the limitation of “the optical fiber being formed in a spiral shape around a bar.” This limitation allows the fixing member to adjust a radius of an annular shaped fiber.

van Woesik remains the closest prior art of record in this application. However, in light of the applicant’s amendment, claims 4, 5, 9, 15, 17, 18 and 19 are allowable as distinguished over the prior art of record because of the reason stated above. It is this examiner's position that prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious the limitations of the claims discussed above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Reasons for Allowance.”

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*Allowable Subject Matter*

7. Claims 1, 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowed.

Independent claim 1 is allowed because the prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, comprising: a fixing member for fixing and bundling at least two portions of the optical fiber at a crossing zone of the two portions; in combination with the other recited limitations in the claim. Claims 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowable as dependent upon claim 1.

8. Claims 2, 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowed.

Independent claim 2 is allowed because the prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, comprising: a fixing member for fixing and bundling at least two portions of the optical fiber at a crossing zone of the two portions; in combination with the other recited limitations in the claim. Claims 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowable as dependent upon claim 2.

9. Claims 3, 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowed.

Independent claim 3 is allowed because the prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, comprising: intermediate regions of the optical fiber in an arc shape, the plurality of annular portions are fixed on a member; in combination with the other recited limitations in the claim.

Claims 6, 7, 8, 10, 11, 12, 13, 14, and 15 are allowable as dependent upon claim 3.

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10. Claims 4, 5, 9, 15, 17, 18 and 19 are allowed.

Independent claim 4 is allowed because the prior art, taken alone, fails to disclose or, taken in combination, fails to render obvious an optical fiber, for irradiation-light transfer for exiting from an exit terminal thereof irradiation light incident from an incidence terminal thereof, comprising: an intermediate region of the optical fiber being formed in a spiral shape around a bar; in combination with the other recited limitations in the claim. Claims 5, 9, 15, 17, 18 and 19 are allowable as dependent upon claim 4.

### ***Conclusion***

11. The prior art made of record in Form 892 and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Radkowski whose telephone number is (571) 270-1613. The examiner can normally be reached on Monday - Thursday, 8 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font, can be reached on (517) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, See <http://pair-direct.uspto.gov>. Should you have questions on access to the Private



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PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call (800) 786-9199 (IN USA OR CANADA) or (571) 272-1000.

/Peter P. Radkowski/  
Patent Examiner, Art Unit 2883

/K. Cyrus Kianni/  
Primary Examiner, Art Unit 2883

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May 15, 2009